

luminance signals by using the data from the whole-color-pass filters and the data from peripheral pixels of the four pixels adjoining vertically and horizontally, and generates the two kinds of color-difference signals by using the data from the cyan or yellow-pass filter and the data from the peripheral pixels." to --the signal processing circuit generates, among the four luminance signals, two luminance signals in the positions of the two whole-color-pass filters by using only the data obtained from the positions, and generates the remaining two luminance signals in the positions of the filters transparent to two different kinds of colors, by using the chrominance data obtained from the respective positions and the data obtained from peripheral pixels of the four pixels, and generates the chrominance signals by using the data obtained from peripheral pixels of the four pixels including the data obtained from the positions of the filters transparent to two different kinds of colors.--

line 25, after "the whole-color-pass filters," insert --and the remaining two luminance signals are generated by interpolation from the data of peripheral pixels including the chrominance data in the positions of the filters transparent to two different kinds of colors,--.

Page 9,

line 8, change "color-difference signals" to --chrominance signals--.

line 19, change "color-difference signals" to --chrominance signals--.

Page 10,

lines 1 to 6, delete "the color separation filter having one arrangement pattern comprising vertically and horizontally adjoining four pixels, comprises a whole-color-pass filter and a cyan-pass filter for the upper two pixels from the left, and a yellow-pass-filter and a whole-color-pass filter for the lower two pixels from the left, and".

line 15, change "a whole-color-pass signal" to --a luminance signal--.

Page 14,

lines 2 to 3, change "the color-difference signal" to --the chrominance signal--.

lines 10 to 11, change "the color-difference signal" to --the chrominance signal--.

Page 16,

lines 21 to 22, change "two pieces of chrominance data" to --two kinds of chrominance data each by one, two, or four--.

Page 23,

line 14, change "it approximates" to --it is approximated--.

line 19, change "Further," to --In the present invention, however, since degradation in resolution of the luminance signal Y in the position where no whole-color-pass filter exists is increased in the above-described simple method--.

Page 27,

lines 8 to 10, delete "in a simple method as follows.  $Y(h,v)=a X((W(h-1,v)+W(h+1,v)+W(h,v-1)+W(h,v+1))\div 4)$ ".

line 18, change "may be" to --is--.

#### **IN THE CLAIMS:**

**Kindly amend as follows:**

- 1.(Amended) A solid-state color image pickup apparatus comprising:
  - a solid-state image pickup device being provided with;
  - a color separation filter having one arrangement pattern comprising four pixels adjoining vertically and horizontally, said color separation filter of this arrangement pattern